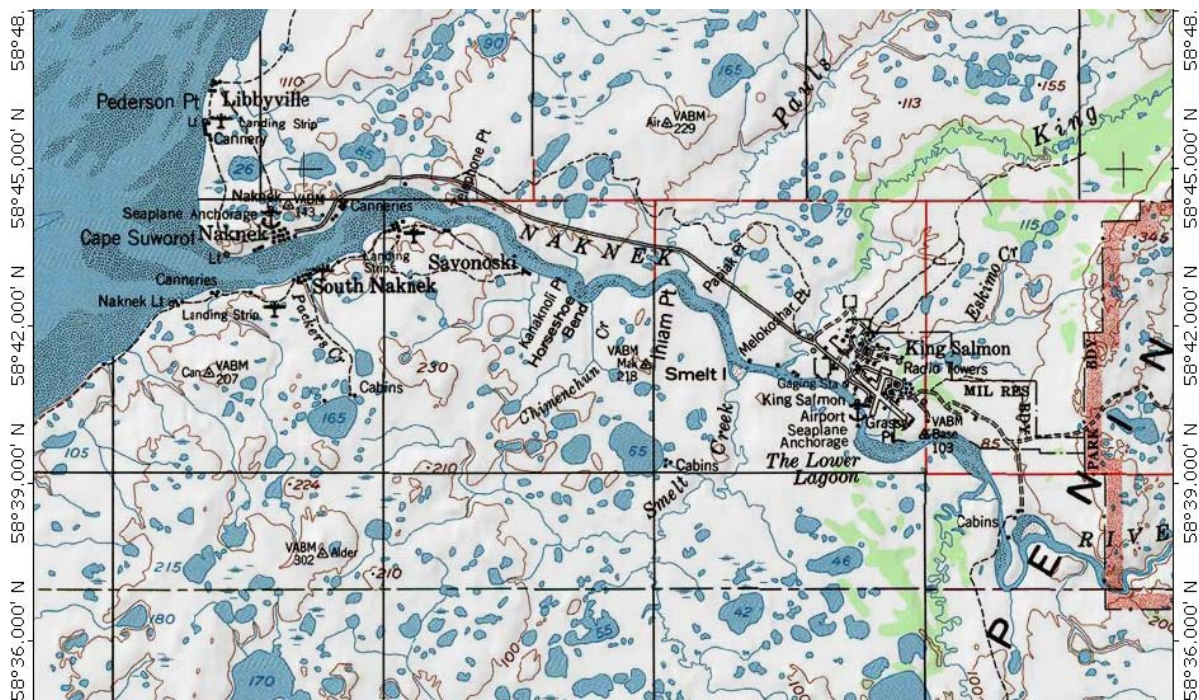


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## Appendix C. Community profile

This appendix presents a community profile of the Bristol Bay Borough including information on location and setting, history, government structure, demographics, and economics. There are three communities within the Bristol Bay Borough: King Salmon, Naknek, and South Naknek. Their close proximity, within a 16-mile radius of each other, is one reason why the communities themselves remain unincorporated, with the Borough serving the role of local government. All three communities are located along the Naknek River as shown in Figure 1.

**Figure 1. Bristol Bay Borough: Naknek, King Salmon, South Naknek.**



**Source:** U.S. Geologic Survey, National Geographic TOPO! Software.

### Regional and communities' settings

The Bristol Bay Borough is in southwestern Alaska, at the head of Kvichak Bay, an arm of the larger Bristol Bay. It is slightly less than 300 miles southwest of Anchorage. The Bristol Bay Borough is approximately 500 square miles in land area, and is geographically the smallest borough in Alaska. It was incorporated in 1962 (as Alaska's first borough), in part to capture fish taxes generated by local salmon processors (DCED, 2003). The three commercial fishing communities are located on the Alaska Peninsula, extending southwest toward the Aleutian chain.

Naknek had 614 residents in 2003, as estimated by the State Department of Labor and Workforce Development (DOLWD). The village is on the north side of the Naknek River, which is located at the northeastern end of Bristol Bay. King Salmon had an estimated 385

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residents in 2003 (DOLWD). Like Naknek, it is located on the north bank of the Naknek River, approximately 16 miles east of Naknek.

South Naknek, a more traditional community, is located on the south bank of the Naknek River with an estimated 102 residents in 2003 (DOLWD). South Naknek is not connected by road to the other communities.

The regional setting is primarily maritime with cool, humid, and windy weather. Average summer temperatures range from 42 to 63 degrees Fahrenheit with average winter temperatures of 29 to 44 degrees. Extremes range from -46 to 88 degrees. Total precipitation for the three communities is 20 inches annually, including 45 inches of snow.

King Salmon is located at the extreme western boundary of Alaska's forested land. Local trees and biomass provide fuel for campfires but they are insufficient for commercial processing or sustained building heating.

## Historical background

Athabascan Indians, Central Yup'ik Eskimos, and Sugpiaq (Aleut-Russian) Eskimos settled this region in pre-historical times. Hunting and fishing camps along the Naknek River date from 3,000 to 4,000 B.C., and are approximately 6,000 years old.

The first Russian traders arrived in 1818 and two years later a Russian settlement was established. A Russian church was built nearby in 1841; Russian activity was strong until the United States purchased Alaska in 1867.

**King Salmon.** The King Salmon Air Force Base was developed during World War II and was operational until 1993. Since then, the runways have been under State of Alaska control with occasional military use. The long runways have maintained King Salmon as a regional hub for air transport, including passengers and fish cargo.

**Naknek.** Captain Lt. Vasiliev first noted Naknek in 1821 as the Eskimo village of Naugeik. The village was called Kinuyak in 1880 and was later spelled Naknek by the Russian navy. Russians inhabited the area until 1867. A salmon cannery opened on the Naknek River in 1890 and by 1900 there were approximately 12 canneries in Bristol Bay. A post office was established in 1907. Naknek serves as the center of local government.

**South Naknek.** South Naknek was settled in modern times around the 1900s due to salmon cannery development. Before then, the area was Sugpiag Aleut territory for about 6,000 years. South Naknek was the seasonal hunting and gathering region for the Sugpiaq Aleuts. Some of its villagers were relocated from New and Old Savonoski near the Valley of Ten Thousand Smokes. South Naknek is also one of the villages where reindeer herds were introduced by the Bureau of Indian Affairs in the 1930s.

## Government structure

The Bristol Bay Borough is a second-class borough within the State of Alaska. Borough population in 1970 was 1,147 and was approximately 1,105 people in 2003, based on an estimate by the State Demographer (DOLWD, 2004).

All three communities within the Borough are unincorporated. The three communities are located with the regional boundaries of the Bristol Bay Native Corporation.

The Borough supports the Bristol Bay School District and its students.

The Borough Mayor has a five-person assembly to help govern the area and oversee the Borough Manager. A seven-member planning and zoning commission assists the Borough Assembly. There is also a school board, with five members. Municipal employees include a Police Chief, Fire Chief, Port Administrator, Public Works director, Superintendent of Schools, and other employees to handle tax assessments, legal matters, the landfill and public works. A Community Development Department administers Borough land use functions.

The Borough's current property tax is 13.0 mills (4.14 mills for schools and 8.86 for general services<sup>1</sup>) and there is a 3.0 percent Raw Fish Tax and 10 percent Accommodations Tax from May to October.

## **Population demographics**

Information about population trends and characteristics helps describe the general nature of a community or area. An analysis of population trends can help determine if changes are occurring for specific groups defined by age, gender, race, or education level, thereby influencing the nature of social and economic relationships in the community. The Bristol Bay Borough has some distinct demographic characteristics and trends that will be discussed in this section.

### **Population**

Table 1 shows the population for the Bristol Bay Borough and its three communities at 10-year intervals, 1960 through 2000, along with the estimated population for 2003 (DOWLD), and the percent change between 1990 and 2000 and 2000 and 2003. The Bristol Bay Borough population decline between 1990 and 2000 was driven by the large decline in population experienced by the community of King Salmon. King Salmon's population declined almost 37 percent between 1990 and 2000, and another 12 percent between 2000 and 2003. In contrast, Naknek's population increased almost 18 percent between 1990 and 2000, but then decreased approximately 10 percent between 2000 and 2003. The population of South Naknek remained stable between 1990 and 2000, but dropped over 25 percent between 2000 and 2003.

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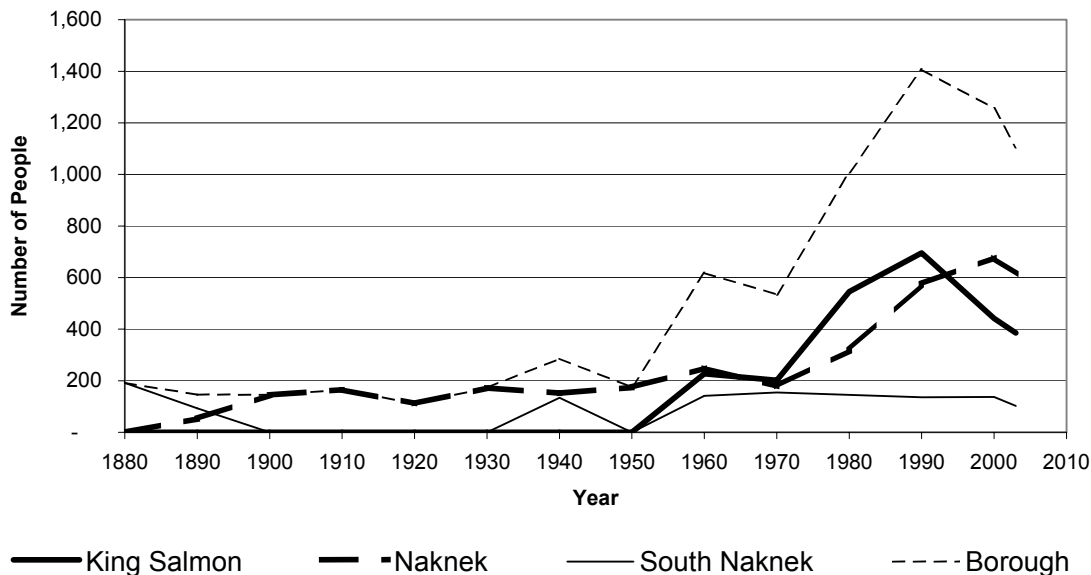
<sup>1</sup> Bristol Bay Borough, Assembly Meeting Minutes, May 5, 2003.<http://www.theborough.com>.

**Table 1. Population 1960 through 2003 and Percent Change**

	1960	1970	1980	1990	2000	2003	Percent Change Between 1990 and 2000	Percent Change Between 2000 and 2003
King Salmon	227	202	545	696	442	385	-36.5	-13.0
Naknek	249	178	318	575	678	614	17.9	-9.4
South Naknek	142	154	145	136	137	102	-10.7	-25.5
Borough	618	534	1,008	1,407	1,257	1,105	-10.6	-12.1

Source: U.S. Census Bureau. Census 2000 and DOWLD.

Figure 2 shows a graph of population trends for the Bristol Bay Borough and its individual communities from 1890 through 2003. Population in the Bristol Bay Borough reached a peak in 1993. The population then declined significantly with the closure of the U.S. Air Force base at King Salmon in 1994 with continued declines since that time.

**Figure 2. Population Trends, King Salmon, Naknek, South Naknek, and Bristol Bay Borough, 1880-2003**

Source: Alaska Department of Community and Economic Development, Community Profiles. So

## Race

A majority of the Bristol Bay Borough is non-Native. U.S. Census figures show that in 2000, approximately 53 percent of Borough residents were white, and 44 percent were Alaska Native or American Indian.

Historic ties exist with the Aleut, Yupik Eskimo, and Athabascan cultures, but commercial fishing opportunities have brought many non-Natives to the Borough. South Naknek is a traditional Sugpiaq village with a fishing and subsistence lifestyle (DCED 2003). A federally

recognized tribe is located in the community—the South Naknek Village Council (Quinyang). Almost 84 percent of the population of South Naknek is Alaska Native or part Native.

**Table 2. Race, Census 2000**

Geographic Area	White	Alaska Native	Black	Asian	Hawaiian	Other Race	Two or More	Percent Native
King Salmon	293	128	5	1	0	1	14	30.1
Naknek	349	307	0	1	5	0	16	47.1
South Naknek	18	115	2	1	1	0	0	83.9
Borough	661	550	7	3	6	1	30	43.7

Source: U.S. Census Bureau, Census 2000, SF-3.

Table 3 shows population and race distribution for the Bristol Bay Borough for 1980, 1990, and 2000. Alaska Native percentages increased from approximately 33 percent in 1980 to 44 percent in 2000. This increase in the Alaska Native population is due in part to a continual increase in the Alaska Native population and a decrease in the number of white residents between 1990 and 2000.

**Table 3. Population and Race Distribution for Bristol Bay Borough, 1980, 1990, and 2000**

Race	1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent
Total Population	1,094	100	1,410	100	1,258	100
Hispanics	30	2.7	33	2.3	7	0.6
White	653	59.7	881	62.5	656	52.2
Black	46	4.2	38	2.7	7	0.6
Alaska Native and American Indian	360	32.9	446	31.6	550	43.7
Asian	5	0.5	12	1.0	3	0.2
Hawaiian and Pacific Islander	-	-	-	-	6	0.5
Two or More Races	-	-	-	-	29	2.3

Source: [Census 2000](#) analyzed by the [Social Science Data Analysis Network \(SSDAN\)](#).

In 1980 and 1990 “Asians” included Hawaiians and Pacific Islanders.

### **Age and Gender**

Age distribution gives an indication of whether the population of a community is generally young or old and growing or declining. It is a predictor of future school enrollments, an indicator of what resources and programs the community may need for specific age groups, and one source of information about the available labor force.

Table 4 shows six cohort groups, median age, and gender for Alaska, the Bristol Bay Borough, King Salmon, Naknek, and South Naknek. The median age for the Bristol Bay Borough and each of its communities is higher than the median age for the state as whole.

The Bristol Bay Borough also has a slightly higher percent of individuals under 18 than Alaska. In terms of individual communities, South Naknek and King Salmon have a smaller percent of individuals under 18 than Alaska statewide averages. In Naknek, where the high school is located, 35 percent of the population is under 18.

**Table 4. Total Population, Age and Gender, 2000 Census**

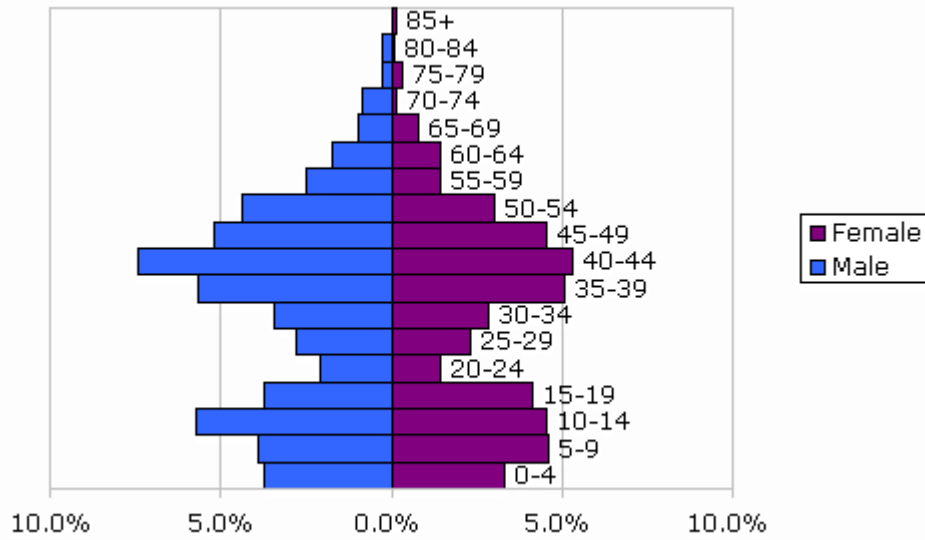
Geographic Area	Total Population	Percent of Total Population					Median Age	Males per 100 Females	
		Under 18	18 to 24	25 to 44	45 to 64	65 and Older		All Ages	18 and Over
Alaska	626,932	30.4	9.1	32.5	22.3	5.7	32.4	107.0	107.6
Borough	1,258	31.3	5.9	34.8	24.2	3.8	36.0	119.5	125.6
King Salmon	442	26.2	7.0	35.7	28.1	2.9	37.8	122.1	131.2
Naknek	678	35.0	4.6	34.8	21.8	3.8	34.4	116.6	121.6
South Naknek	137	29.9	8.8	32.1	22.6	6.6	35.8	128.3	128.6

Source: U.S. Census Bureau, Census 2000, GCT-P5.

Figure 3 is a “population pyramid” for Bristol Bay Borough showing the area's age-sex structure and hinting at its patterns of growth. A top-heavy pyramid, suggests negative population growth that might be due to any number of factors, including high death rates, low birth rates, and increased emigration from the area. A bottom heavy pyramid suggests high birthrates, falling or stable death rates, and the potential for rapid population growth. Most areas, however, fall somewhere between these two extremes and have a population pyramid that resembles a square, indicating slow and sustained growth with the birth rate exceeding the death rate, though not by a great margin.

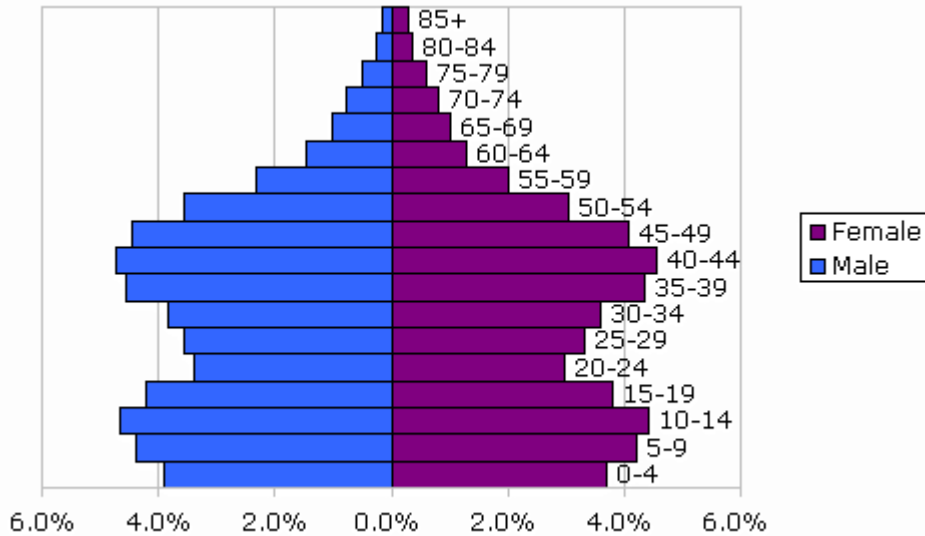
Figure 4 shows the age distribution for Alaska as a whole for comparative purposes. Of note in the Bristol Bay Borough pyramid is the greater number of males in the 10 to 14 age and the 40 to 44 age categories.

**Figure 3. Age Distribution, 2000 Census, Bristol Bay Borough**



Source: [Census 2000](#) analyzed by the [Social Science Data Analysis Network \(SSDAN\)](#).

**Figure 4. Age Distribution, 2000, Alaska**



Source: [Census 2000](#) analyzed by the [Social Science Data Analysis Network \(SSDAN\)](#).

### **Place of Birth, Citizenship, and Residence**

The Census includes all residents of the United States, regardless of their citizenship status. Table 5 shows the place of birth and citizenship for residents of the Bristol Bay Borough. Almost 99 percent of Bristol Bay Borough residents were born in the United States, but half of them are from Outside of Alaska. In 1990, almost 60 percent were born in another state.

At the time of the 2000 Census, 56 percent of the population five years and older in the Bristol Bay Borough lived in the same house that they had lived in 1995 (Table 6 and Figure 5). At the time of the 1990 census only 33 percent of the population lived in the same house they had lived in five years earlier.

**Table 5. Place of Birth and Citizenship Status, 1990 and 2000  
Bristol Bay Borough**

Residence	1990		2000	
	Number	Percent	Number	Percent
Total Population	1,410	100.0	1,258	100.0
Born in U.S.	1,376	97.6	1,241	98.7
Born in Same State	542	38.4	627	49.8
Born in Different State	834	59.6	614	48.8
Born Outside US	13	0.9	10	0.8
Total Foreign Born Population	21	1.5	7	0.6
Naturalized	12	0.9	5	0.4
Non-Naturalized	9	0.6	2	0.2

Source: [Census 2000](#) analyzed by the [Social Science Data Analysis Network \(SSDAN\)](#).

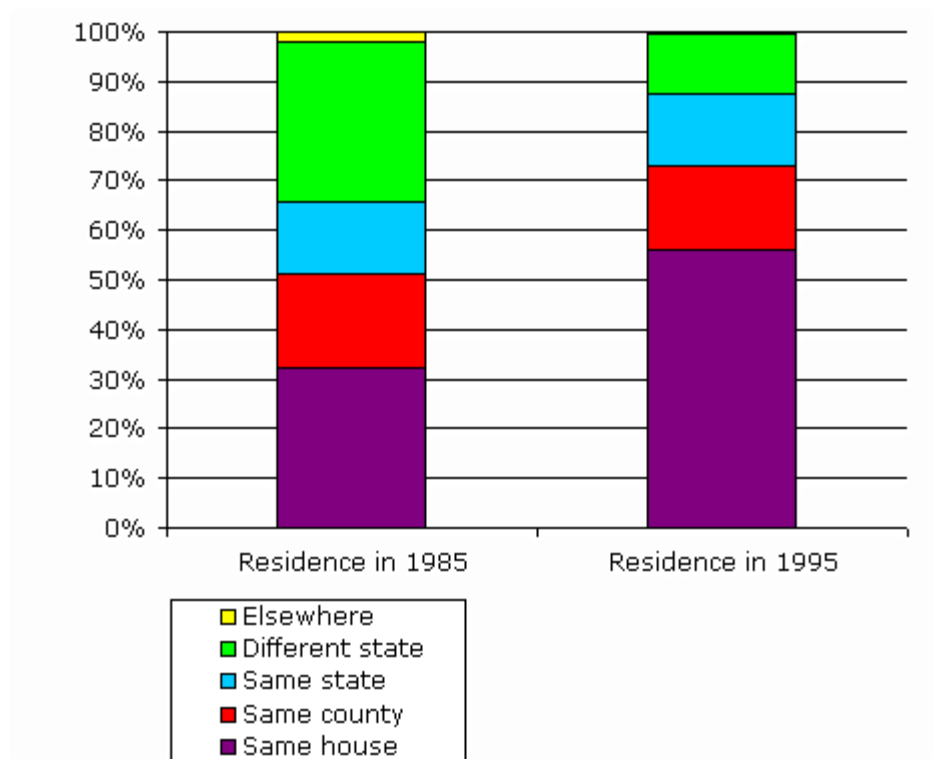
**Table 6. Migration, Residence Five Years Prior to 1990 and 2000 Census  
Bristol Bay Borough**

Residence	1985		1995	
	Number	Percent	Number	Percent
Same House	417	32.4	656	56.1
Different House	870	67.6	513	43.9
Same Borough	243	18.9	198	16.9
Different Borough	599	46.5	311	26.6
Same State	185	14.4	171	14.6
Different State	414	32.2	140	12.0
Elsewhere in 1995*	28	2.2	4	0.3

Source: [Census 2000](#) analyzed by the [Social Science Data Analysis Network \(SSDAN\)](#).



**Figure 5. Residence Five Years Prior to 1990 and 2000 Census  
Bristol Bay Borough**



Source: [Census 2000](#) analyzed by the [Social Science Data Analysis Network \(SSDAN\)](#).

### **Households**

While the Bristol Bay Borough's population decreased between 1990 and 2000, the number of households increased from 407 to 490. The number of married households with children decreased from 55 percent of total households in 1990 (241) to 49 percent of total households in 2000 (224). Non-family households increased approximately six percent, 135 to 189, between 1990 and 2000.

**Table 7. Household Types, 1990 and 2000  
Bristol Bay Borough**

Type of Household	1990		2000	
	Number	Percent	Number	Percent
Total Households	407	100.0	490	100.0
Married Couple	224	55.0	241	49.2
With Children*	142	34.9	142	29.0
Without Children*	82	20.1	99	20.2
Female-Headed	25	6.1	30	6.1
With Children*	16	3.9	21	4.3
Without Children*	9	2.2	9	1.8
Male-Headed	23	5.7	30	6.1
With Children*	12	2.9	24	4.9
Without Children*	11	2.7	6	1.2
Non-Family	135	33.2	189	38.6
Householder Living Alone	110	27.0	153	31.2
Two or More Persons	25	6.1	36	7.3

\* For the purposes of this table, "children" are people under age 18.

Source: [Census 2000](#) analyzed by the [Social Science Data Analysis Network \(SSDAN\)](#).

## Economy

The following economic profile describes Bristol Bay Borough's changing economy. Indicators such as total value-added by industry sector, place of work, employment status, occupation, employment by industry, income, and poverty rates are included. The Bristol Bay Borough's economy is highly seasonal and has been based almost entirely on the harvesting and processing of wild sockeye from Bristol Bay.

In recent years, low salmon prices and smaller harvests have severely affected the area's economy. Many fishers have dropped out of the fishery. The number of drift net vessels dropped from more than 1,890 participants in the 1990s to 1,183 in 2002 (DOLWD). A total of 194 Borough residents hold commercial fishing permits (DCED 2003). The Borough's revenues depend upon the fish taxes generated by local processors so a decline of the fisheries leads to adverse budgetary consequences for local government.

Historically, commercial fishing, processing businesses, government jobs, and transportation services have been the mainstays of the Borough's economy. With the downturn in demand for salmon, tourism is becoming a more important segment of the regional economy.

The King Salmon runway is 8,515 feet of pavement and serves as the area's main transportation hub. The Naknek River, next to King Salmon, serves floatplane traffic headed for locations such as Katmai National Park and Preserve, the Brooks Camp, McNeil River

State Game Refuge, and other fishing locations. Currently an FAA control tower is located at the airport.

The communities of Naknek and South Naknek have been service centers for the salmon fishery in Bristol Bay. Fish are trucked about 15 miles from Naknek to King Salmon for jet service to Anchorage and other markets. Trident Seafoods, North Pacific Processors, and Ocean Beauty are the three salmon processors in the community. Naknek is the headquarters of the Bristol Bay Borough.

There are four docks on the Naknek River, operated by the National Park Service, U.S. Fish and Wildlife Service, Alaska State Troopers, and the Bristol Bay Borough. Bulk waterborne cargo is off-loaded at Naknek and trucked to King Salmon by paved road. Under the right conditions, an ice road is often built to South Naknek in winter.

The community of South Naknek has traditionally been fishing dependent. Trident Seafoods is located in South Naknek, but the Wards Cove processing plant closed in 2002.

King Salmon has 92 business licenses, Naknek has 102, and South Naknek has 10 (DCED 2003).

### **Total Value-Added**

Figure 6 shows the total value-added estimates as derived from IMPLAN<sup>2</sup> for the different sectors of the Bristol Bay Borough economy (aggregated at the 1-digit SIC level).

Figure 7 shows the value added for the different sectors of the Alaska economy so comparisons can be made between the Bristol Bay Borough and the State. At the 1-digit SIC level, it should be noted that value-added totals related to the fishing industry fall into either the “agriculture” sector or the “manufacturing” sector as shown in Table 8.

Commercial Fishing and Agriculture, Forestry, and Fishery Services are both captured in the “agriculture” sector,” while canned, cured, prepared fresh, frozen seafoods fall into the “manufacturing” sector.

Value added shows the contributions of various industry sectors to the Bristol Bay Borough economy and helps determine the relative importance of an industry to the Bristol Bay Borough economy. Value-added refers to the total value of payments to the different factors of production and is equivalent to the gross regional product. Value-added can be an important indicator of industry health and success because it is a measure of industry activity derived by subtracting the costs of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for the products manufactured. Value-added is equal to the value of shipments minus intermediate production inputs, and thus represents the amount available for wages, salaries, and profits in an industry.

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<sup>2</sup> IMPLAN, an input-output model, developed by MIG Group, Inc. is an accounting framework for analyzing the flow of goods and services among businesses and between businesses and final consumers. Such a model is useful for defining the relationships and the degree of interdependency between various industries or sectors of an economy. IMPLAN can be used to look at regional differences in the economic contribution by various sectors to the economy and to determine the relative importance of an industry to a regional economy.

**Table 8. Value-Added for the Fishing Industry in Bristol Bay Borough, 2000**

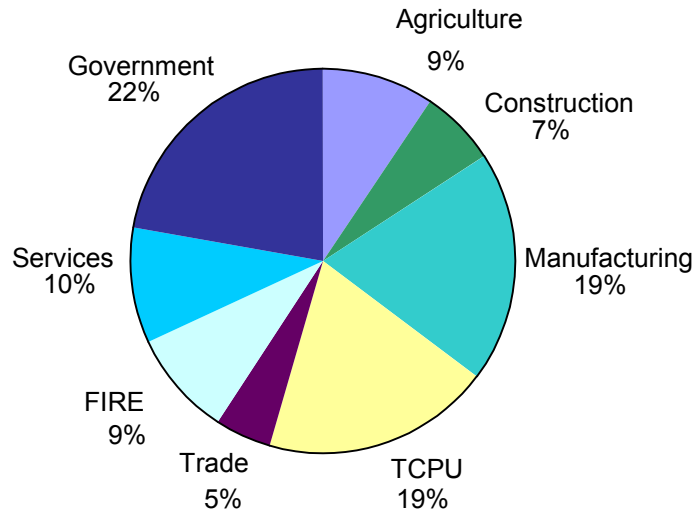
	Commercial Fishing \$Million	Ag., Forestry, and Fishery Services \$Million	Canned, Cured Seafood \$Million	Prepared Fresh, Frozen Seafood \$Million
Value Added				
Employee Compensation	\$0.303	\$0.179	\$4.860	\$7.058
Proprietary Income	\$2.868	\$2.317	\$0.020	\$0.043
Other Property Type Income	\$0.758	\$0.593	\$1.199	\$1.349
Indirect Business Taxes	\$0.079	\$0.135	\$0.162	\$0.308
Employment (# of jobs)	259	347	104	301
Total Industry Output	\$4.271	\$5.906	\$16.305	\$47.621
Output per Worker	\$16,499	\$17,019	\$156,270	\$158,468
Earnings per Worker	\$12,252	\$7,194	\$46,767	\$23,631

Source: Economic Diversity—MIG Group, Inc. IMPLAN Model Output based on 2000 IMPLAN Model.

A comparison of the value-added estimates for the Bristol Bay Borough and Alaska as a whole show some striking differences. In the Bristol Bay Borough, the agriculture sector accounts for nine percent of the total Borough value-added, but accounts for only two percent of the state total value-added.

In the Bristol Bay Borough, the manufacturing sector accounts for 19 percent of the total value-added but only four percent of the total state value-added. Government accounts for 22 percent to the value-added for the Bristol Bay Borough and 26 percent for the State.

**Figure 6. Value Added by Major Industry Sector in the Bristol Bay Borough as Percent of Total Value-Added, 2000**

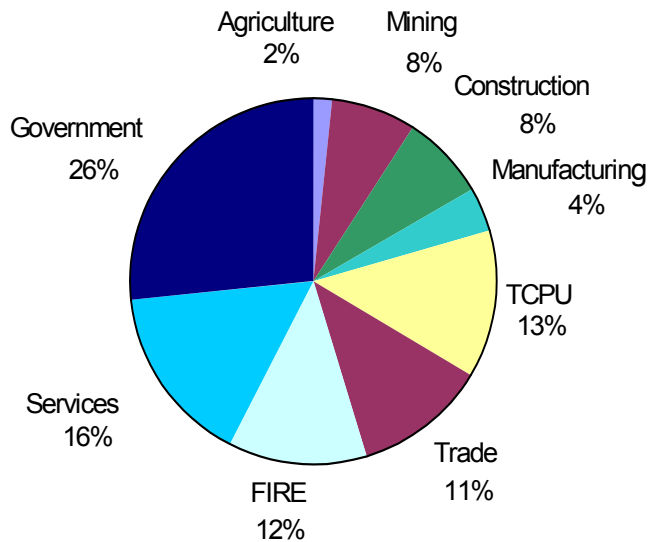


Source: Economic Diversity—MIG Group, Inc., IMPLAN Model Output, based on 2000 IMPLAN Model.

Note: FIRE = Finance, insurance, and real estate.

TCPU = Transportation, communications, and public utilities.

**Figure 7. Value Added by Major Industry Sector in Alaska as Percent of Total Value Added, 2000**



Source: Economic Diversity—MIG Group, Inc., IMPLAN Model Output, based on 2000 IMPLAN Model.

Note: FIRE = Finance, insurance, and real estate.

TCPU = Transportation, communications, and public utilities.

### **Salmon Fishery and Fish Processing**

Many Bristol Bay Borough residents participate directly in the Bristol Bay salmon fishery either as limited entry permit owners or as crew. Table 9 shows the number of salmon fishery permits held and fished by Borough residents for 1995 through 2001. The number of permits *held* for the Bristol Bay Management Area and for other salmon management areas decreased between 1998 and 2001. The number of permits *fished* decreased between 1999 and 2001 for both categories—the Bristol Bay management area and other salmon management areas fished by Borough residents.

**Table 9. Bristol Bay Borough Resident Salmon Permit Ownership and Activity**

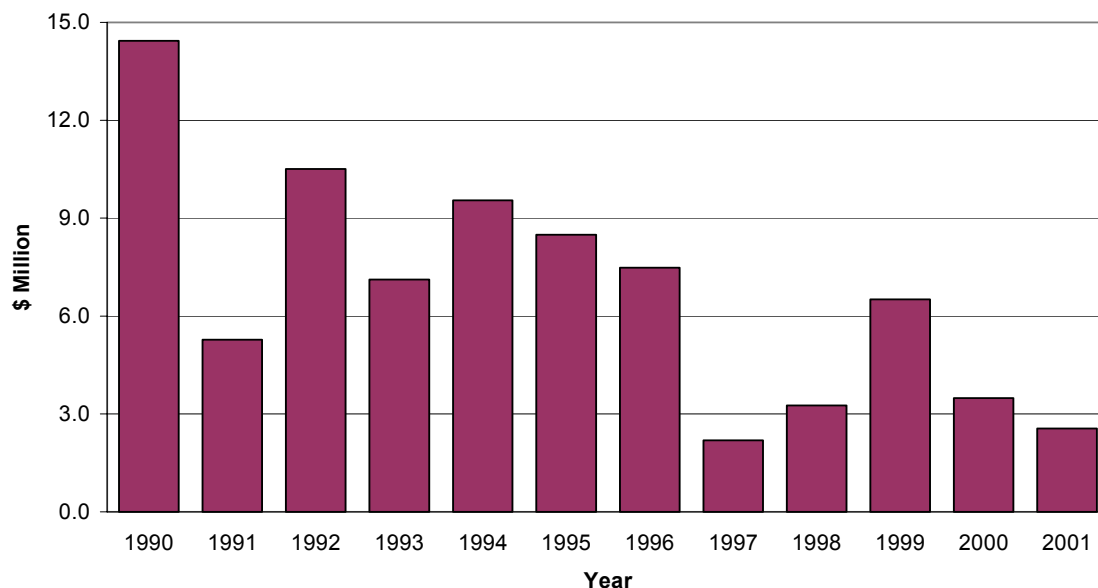
Year	Bristol Bay Management Area		Other Salmon Management Areas	
	Held	Fished	Held	Fished
Total	1,375	1,295	1,371	1,315
1995	200	192	198	194
1996	205	194	204	196
1997	199	181	198	189
1998	204	191	203	195
1999	198	194	197	196
2000	182	177	184	179
2001	187	166	187	166

Source: Alaska Commercial Fisheries Entry Commission, Census Area Tables. Accessed at [http://www.cfec.state.ak.us/menus/mnus\\_pmt.htm](http://www.cfec.state.ak.us/menus/mnus_pmt.htm).

Another indicator of the importance of the salmon fishery to Borough residents is the revenue earned by resident permit holders. Figure 8 shows total adjusted gross revenues earned by Bristol Bay Borough resident setnet and driftnet permit holders for 1990 through 2001. Total adjusted gross revenues decreased from a high in 1990 of \$14,432,175 to a low of \$2,551,779 in 2001.

The information on number of permits held and fished along with total adjusted gross revenues is provided because conventional employment statistics can be difficult to interpret in areas such as Bristol Bay Borough. Due to the manner in which self-employed fishers are considered, the number of residents practicing a subsistence lifestyle, and the significant number of seasonal, nonresident workers who participate in the local economy.

**Figure 8. Total Adjusted Gross Revenue Earned by Bristol Bay Borough Resident Setnet and Driftnet Permit Holders, 1990-2001**



Source: Alaska Commercial Fisheries Entry Commission, Census Area Tables. Accessed at [http://www.cfec.state.ak.us/menus/mnus\\_pmt.htm](http://www.cfec.state.ak.us/menus/mnus_pmt.htm).

### **Employment**

Table 10 shows average monthly employment by industry in the Bristol Bay Borough for 1995 through 2001. Employment in manufacturing which includes fish processing experienced a significant drop in employment between 2000 and 2001 from 378 individuals to 123. Employment numbers in the following table do not include self-employed individuals.

**Table 10. Bristol Bay Borough Average Monthly Employment by Industry, 1995–2001.**

Industry Sector	1995	1996	1997	1998	1999	2000	2001
<b>Private Sector</b>							
Construction	24	35	49	33	23	27	33
Manufacturing	361	208	264	279	238	378	123
Trans. Comm. & Util.	142	147	145	142	145	151	151
Wholesale Trade	12	13	19	11	3	3	3
Retail Trade	94	106	103	102	86	72	49
Finance, Insurance, Real Estate.	13	11	11	16	32	29	37
Services	117	119	113	116	113	104	80
Lodging	78	78	70	71	70	59	47
Membership Orgs.	5	8	9	20	26	20	3
<b>Government</b>							
Federal	51	50	51	46	45	41	77
State	30	30	30	29	26	26	30
Local	301	298	321	298	299	302	310

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, Industry Employment. Accessed at <http://almis.labor.state.ak.us/?PAGEID=67&SUBID=185>.

A community's labor force provides a measure of how much employment and economic activity a community may have. Labor force is defined as the number of persons 16 years of age or older, the age at which an individual is legally able to work. Employment levels are based on the number of people in the labor force, whereas unemployment levels are based on the number of people in the labor force that are unemployed and looking for employment. Table 11 shows the number and percent of individuals 16 years and older, individuals in this age category in the civilian labor force, and employed and unemployed individuals. Unemployment rates do not take into account those individuals who are underemployed or discouraged workers who have given up hope of finding a job and are not actively seeking employment. In the Bristol Bay Borough approximately 72 percent of the population 16 years and over is in the labor force.

Within the Bristol Bay Borough, the 1999 (U.S. Census) unemployment rate among the population 16 years and over in the labor force ranged from a low of 6.9 percent in King Salmon to a high of 12.5 percent in South Naknek.



**Table 11. Employment Status of Population 16 Years and Over, Census 2000**

Employment Status	Alaska		Bristol Bay Borough		King Salmon		Naknek		South Naknek	
	No.	%	No.	%	No.	%	No.	%	No.	%
Population 16 years and over	458,054	100	908	100	346	100	450	100	112	100
In labor force	326,596	71.3	649	71.5	271	78.3	320	71.1	58	51.8
Civilian labor force	309,485	67.6	649	71.5	271	78.3	320	71.1	58	51.8
Employed	281,532	61.5	581	64	247	71.4	290	64.4	44	39.3
Unemployed	27,953	6.1	68	7.5	24	6.9	30	6.7	14	12.5
Percent of civilian labor force	9	-	10.5	-	8.9	-	9.4	-	24.1	-
Armed Forces	17,111	3.7	0	0	0	0	0	0	0	0
Not in labor force	131,458	28.7	259	28.5	75	21.7	130	28.9	54	48.2

Source: U.S. Census Bureau, Census 2000, SF-3.

Table 12 shows the occupation of the employed civilian population 16 years and over in the Bristol Bay Borough as reported in Census 2000.

Management, professional and related occupations total approximately 34 percent of the employed workforce, followed by sales and office occupations, accounting for almost 25 percent of the employed workforce.

According to U.S. Census data, farming, fishing, and forestry occupations are the smallest component, with less than one percent of the employed civilian population 16 years and over in that profession. However, employment in fishing occupations is under reported in Census data because of the way census questions are defined and the timing and way data are collected.

**Table 12. Occupation of Employed Civilian Population 16 Years and Over Bristol Bay Borough, Census 2000**

Occupation	Number	Percent
Management, professional, and related occupations	198	34.1
Service occupations	99	17
Sales and office occupations	143	24.6
Farming, fishing, and forestry occupations	4	0.7
Construction, extraction, and maintenance occupations	88	15.1
Production, transportation, and material moving occupations	49	8.4

Source: U.S. Census Bureau, Census 2000, SF-3.

Table 13 shows the place of workers for workers 16 years and over. Almost all employed workers that reside in the Borough work within the Borough.

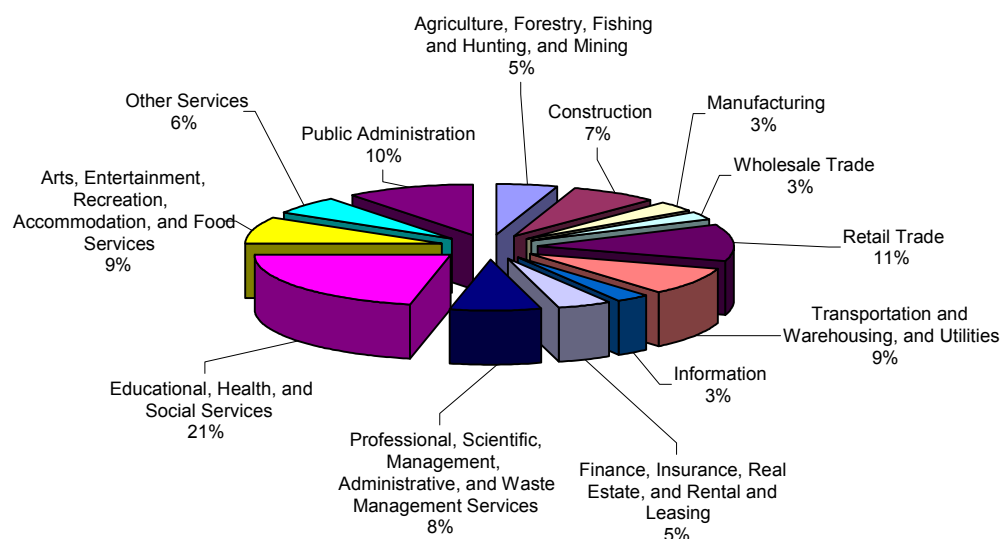
**Table 13. Place of Work for Workers 16 Years and Over**

	King Salmon	Naknek	South Naknek	Borough
Total	237	287	44	568
Worked in state of residence:	237	284	44	565
Worked in borough of residence	237	279	44	560
Worked outside borough of residence	0	5	0	5
Worked outside state of residence	0	3	0	3

Source: U.S. Census Bureau, Census 2000, SF-4.  
Data based on a sample.

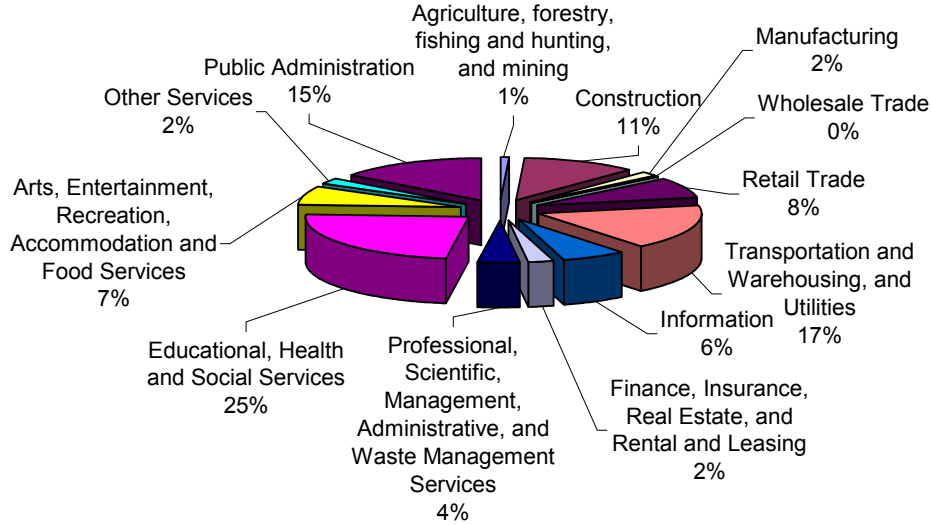
Table 14 shows Borough employment by occupation according to Census 2000. The largest industry segment is educational, health, and social services at 25 percent. Public administration is the second largest category accounting for 15 percent.

**Figure 9. Alaska Percent Employment by Industry  
Census 2000**



Source: U.S. Bureau of the Census, Census 2000 SF-3.

**Figure 10. Bristol Bay Borough Percent Employment by Industry  
Census 2000**



Source: U.S. Bureau of the Census, Census 2000 SF-3.

**Table 14. Percent Employment by Industry  
Bristol Bay Borough, Census 2000**

Industry	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	5	0.9
Construction	66	11.4
Manufacturing	9	1.5
Wholesale trade	2	0.3
Retail trade	45	7.7
Transportation and warehousing, and utilities	101	17.4
Information	37	6.4
Finance, insurance, real estate, and rental and leasing	14	2.4
Professional, scientific, management, administrative, and waste management services	24	4.1
Educational, health and social services	137	23.6
Arts, entertainment, recreation, accommodation and food services	42	7.2
Other services (except public administration)	13	2.2
Public administration	86	14.8

Source: U.S. Census Bureau, Census 2000, SF-3.

Table 15 shows the percentage of four different classes of workers: private wage and salary workers, government workers, self-employed workers in their own business who are not incorporated, and unpaid family workers. The government sector is a significant source of employment in the Borough.

**Table 15. Class of Worker Bristol Bay Borough, 1999**

<b>Employment Class</b>	<b>Number</b>	<b>Percent</b>
Private wage and salary workers	332	57.1
Government workers	215	37.0
Self-employed workers in own not incorporated business	34	5.9
Unpaid family workers	0	0

Source: U.S. Census Bureau, Census 2000, SF-3

### **Income**

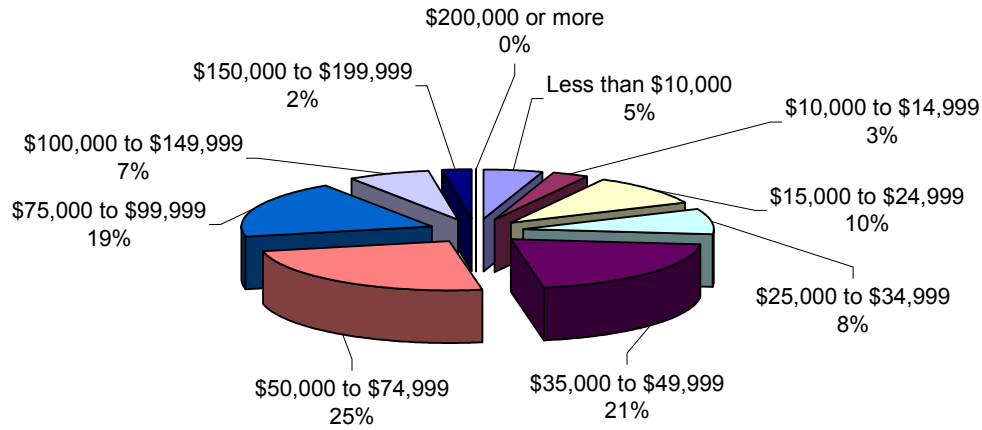
Personal income is the income received by people from all sources—private sector and government wages, salary disbursements, other labor income, farm and nonfarm self employment income, rental income of people, personal dividend income, personal interest income, and transfer payments. Personal income does not have taxes subtracted from it.

Per capita personal income is the annual total personal income of residents of an area divided by the number of residents. Per capita personal income is a measure of economic well-being. The amount of goods and services that people can afford is directly related to their personal income.

According to Census 2000, per capita income in the Borough in 1999 was \$22,210 while median household income was \$52,167. Median earnings for male full-time year-round workers were \$44,286 and \$35,179 for female full-time year-round workers.

Over half of the households in the Borough earned \$50,000 or more in 1999, but at the same time, around eight percent of households earned less than \$15,000. Figure 11 shows the percent of Borough households in each income category as reported in 1999.

**Figure 11. Bristol Bay Borough Household Income, 1999**



Source: U.S. Census Bureau, Census 2000, SF-3.

So

**Table 16. Bristol Bay Borough Type of Income, 1999**

Type of Income	Number	Percent
With earnings	471	95.7
Mean earnings (dollars)	51,020	-
With Social Security income	60	12.2
Mean Social Security income (dollars)	10,875	-
With Supplemental Security Income	12	2.4
Mean Supplemental Security Income (dollars)	6,083	-
With public assistance income	24	4.9
Mean public assistance income (dollars)	3,875	-
With retirement income	52	10.6
Mean retirement income (dollars)	16,448	-

Source: U.S. Census Bureau, Census 2000, SF-3.

The Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor. The poverty thresholds do not vary geographically, but they are updated annually for inflation using the Consumer Price Index (CPI-U). The official poverty definition counts money income before taxes but it does not include capital gains or non-cash benefits such as subsistence.

The poverty rate is a commonly used indicator of the level of economic need in a community. Almost every positive personal and community outcome is negatively affected by poverty. Community factors such as the status of resources like affordable housing, transportation, education and training, jobs providing a living wage, health insurance, and

availability of child care determine to a large extent an area's poverty rate. Previous research has shown that poverty populations in rural communities are more likely to be long term poor than poverty populations in urban areas.<sup>3</sup>

**Table 17. Poverty Status, 1999  
Bristol Bay Borough**

Unit	Percent	
	Bristol Bay Borough	Alaska
Families	6.6	6.7
Individuals	9.5	9.4

Source: U.S. Census Bureau, Census 2000.

## Community facilities

Water distribution and treatment systems, sewers, and wastewater treatment are essential infrastructure for both the Bristol Bay Borough and the seafood processors who process red salmon. From 1992 to 2000, state and federal capital improvements provided \$18 million for safe drinking water, rural sanitation and solid waste services improvements within the Borough.

Census 2000 data indicated 979 total housing units in the Borough. Many are only occupied on a seasonal basis.

The borough operates two separate sewer systems for Naknek and King Salmon, with some individuals continuing with on-site septic systems. There is a two-cell, lined, sewage lagoon that serves King Salmon and the airport.

South Naknek residents rely on individual septic systems or honey buckets.

## Fuel

The primary fuel storage facilities within the Borough are Chevron's fuel tank farm in Naknek. Diesel, gasoline, heating fuel, and aviation fuel are dispatched from Dutch Harbor, or elsewhere, and delivered by barge. One carrier, Northland Services, makes between seven and nine trips annually.

Residents of King Salmon and Naknek purchase their fuel oil and gasoline in Naknek from Chevron and haul it as needed.

## Power

Naknek Electric Association generates power for the Borough, requiring about 1.4 million gallons of diesel each year to generate 20.8 million kilowatt hours. There are 1,140 customers served by Naknek Electric.

<sup>3</sup> Poverty Fact Sheet Series – Rural Poverty, <http://ohioline.osu.edu/hyg-fact>.

Waste heat from the power plant is used to heat the Borough's elementary and high schools, the clinic, a swimming pool, emergency building, the utility building, and five homes. The Alaska Energy Authority ranks the plant and distribution systems as among the most efficient in the state.

### **Solid Waste**

King Salmon has one non-municipal solid waste site, while Naknek has a Class 2 municipal site (accepting between 5 to 20 tons of solid waste per day) and one non-municipal site. South Naknek has one Class 3 Village site (less than 5 tons of solid waste per day).

### **Education**

The Bristol Bay School District consists of two schools. There is a Preschool to High School program in Naknek with an enrollment (2003) of 240 students. South Naknek has a Kindergarten to Fifth Grade school with an approximate enrollment of 10 students.

Students from King Salmon are bussed to Naknek for schooling while students from South Naknek, grades 6 to 12, are flown across the Naknek River each day.

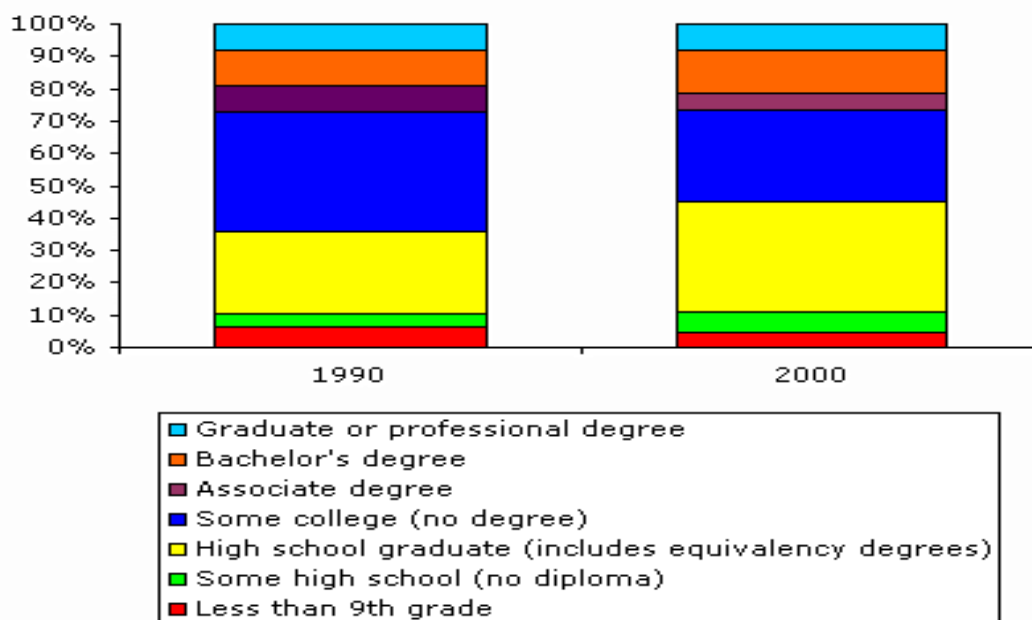
The school district employs approximately 50 people: 25 are certified and 25 are classified.

Figure 12 and Table 18 show educational attainment for the population 25 years and over. Educational attainment is one indicator of the human resources available in a community and the level of workforce preparation.

Around 89 percent of the population 25 years and over has a high school diploma or an equivalency, which slightly exceeds the state's high school completion rate. In 1990 approximately 10 percent of the population 25 years and over in the Borough had less than a high school education. That percent increased slightly to just over 11 percent in 2000. However, the percent of population 25 years and over that are high school graduates has increased from around 26 percent to just over 34 percent.

Of note is that the percent of the population 25 years and over with some college, no degree, associate degrees, and bachelor's degrees has decreased from approximately 56 percent to 47 percent. This information combined with the information portrayed in the age pyramid may signify that a number of individuals in the 20-24 age group are leaving the community for educational or employment opportunities.

The second smallest cohort group in Bristol Bay Borough is the 25 to 29 years old cohort who also may be leaving the community to pursue other employment opportunities elsewhere.

**Figure 12. Educational Attainment, Bristol Bay Borough, 1990 and 2000****Table 18. Educational Attainment in Population 25 Years and Over, 1990-2000  
Bristol Bay Borough**

	1990		2000	
	Number	Percent	Number	Percent
Total Population Age 25+	889	100.00	782	100.00
Less than 9th grade	55	6.19	35	4.48
Some high school, no diploma	36	4.05	52	6.65
High school graduate*	228	25.65	266	34.02
Some college, no degree	329	37.01	220	28.13
Associate degree	73	8.21	44	5.63
Bachelor's degree	94	10.57	101	12.92
Graduate or professional degree	74	8.32	64	8.18

\*"High school graduate" includes people with the G.E.D. and similar equivalents.

Source: [Census 2000](#) analyzed by the [Social Science Data Analysis Network \(SSDAN\)](#).

### **Medical Services**

There are three volunteer emergency medical squads each with an ambulance. Ambulance crews provide basic life support services, with 20 year-round emergency medical services



volunteers. During the summer, local volunteers are augmented with a hired staff of six to eight emergency medical technicians.

The emergency medical services and fire department (see below) has a paid chief who also serves as an emergency medical services coordinator. Fire and emergency medical services budgets are combined. Volunteers receive stipends for call-outs, medical evacuations and training sessions.

The Borough also maintains the Camai Medical Center in Naknek. The health center is a small rural health center equipped for a variety of services, from routine care to major traumas. The center is staff by the Bristol Bay Area Health Corporation.

### **Public Safety and Fire**

The Bristol Bay Police Department has nine employees: a chief, two offices (one in South Naknek), and six dispatchers. The department is located at the Air Force Base in King Salmon.

The department's primary responsibility is law enforcement. It also assists state troopers, the state courts, the district attorney, and full time motor vehicle services, acting as a local Department of Motor Vehicles office. There is detention facility at King Salmon.

The Borough also provides Volunteer Fire and Emergency Medical Services in each of the three communities. Each volunteer fire squad is headed by a Battalion Chief. Equipment is stored in each community in heated storage spaces, with the majority of equipment stored at King Salmon.

South Naknek uses part of its equipment storage facility as an emergency medical clinic, with air or vehicle transportation (depending on seasonal ice roads) to the Borough's Camai Medical Center in Naknek if required.

### **Civic Organization and Social Services**

As noted in the King Salmon Airport Master Plan, the following organizations are present in the Bristol Bay Borough: Lion's Club, Elk's Club, Bristol Bay Elders Action Group, several church organizations and a chamber of commerce. The annual *Fishtival*, held each year at the end of commercial fishing season, has brought many community organizations together for the parade, with civic and organizational floats and displays.

### **Regional Organizations**

Other organizations within the region include: the Alaska Peninsula Corporation; the South Naknek Village Council, the Naknek Native Village (the tribal government, recognized by the Bureau of Indian Affairs); King Salmon Traditional Native Council; the Bristol Bay Borough School District; Lake and Peninsula Correspondence Schools; the Bristol Bay Area Health Corporation; the Lake and Peninsula Borough; the Bristol Bay Native Corporation; and Paug-Vik Incorporated, Limited.

The Southwest Alaska Comprehensive Economic Development Strategy (CEDS) was released in July 2003. The CEDS fulfills state requirements for the region's designation as an Economic Development District.

## **Port of Bristol Bay**

The Port of Bristol Bay is located in Naknek and serves as a hub for southwestern Alaska, since it started operations in 1983. The Bristol Bay Borough sets rates for services, wharfage, handling, dockage, and other rules. The rates and policies are updated annually.

Docks are open from April into November, with spring dredging by cranes. Docks are open from April into November, with spring dredging by cranes to maintain a constant 16 to 18 feet of water at the zero tide level.

A conventional season will see over 150 barges, up to 450 feet in length, and over 400 other commercial vessels, small ships and tenders. The terminal is open 24 hours a day from early May to mid-August with 10 to 12 hour days during the rest of the season.

The Naknek Cargo Dock is 200 x 300 feet, concrete and steel, with six acres of terminal space. A 4,000 square foot warehouse provides inside storage and distribution for smaller cargo.

The Fisherman's Dock is a 200 x 300 foot sheet pile dock that provides moorage, parking and utilities for commercial fishing vessels. There are no individual berths. Utilities include electricity, potable water, restrooms, trash and used oil disposal.

The South Naknek Dock is 80 x 300 feet of concrete and steel. It can hold 200 to 250 containers with undeveloped acreage nearby for future development. There is an additional 200-foot sheet pile area for fishing vessel moorage. It was opened in 1993 and handles approximately 200 to 400 shipping containers (twenty-foot equivalent units) per season.

Port equipment at Naknek includes cranes with 120 and 80-foot booms, 1 1-ton forklifts, 2 31-ton forklifts and various smaller pieces.

South Naknek equipment includes 70-ton crane and a 26-ton forklift.

Northland Services, Inc. is a regular carrier with cargo hauled from Anchorage and Seattle. The main export is Bristol Bay Salmon with several thousand containers handled each year. Refrigerator barges depart two to three times per week for Dutch Harbor. Northland Services Inc. also provides haulage for 1.5 million gallons of fuel for power generation, heating, etc.

## **Development plans**

The Bristol Bay Borough communities list their development plans in two general categories. First, commercial fishing and processing was the major factor behind most business development in the Bristol Bay Borough. Much planned community development will help support commercial fishing and its associated support services, such as transportation, fuel supply, and communication.

Second, community development plans tend to focus on infrastructure such as utilities, transportation (docks and airports) and roads and bridges.

Table 19 is a listing of capital projects and grants from the Rural Alaska Project Information and Delivery System (RAPIDS) for the 2000-2003, as excerpted from the State's Department of Community and Economic Development web site.

**Table 19. Capital Projects and Grants, by Community, Lead Agency, 2000 – 2003.**

<b>Fiscal Year</b>	<b>Community</b>	<b>Lead Agency</b>	<b>Project Description</b>
2003	King Salmon	DCED	Bristol Bay Borough Community Projects and Improvements
2003	King Salmon	DCED	Bristol Bay Borough King Salmon Airport Tower
2003	Naknek	DCED	Bristol Bay Borough Dock Improvement
2003	Naknek	DOT&PF	Airport Snow Removal Equipment
2002	King Salmon	HUD	Indian Housing Block Grant
2002	Naknek	DCED	Cultural Center Feasibility Study
2002	Naknek	HUD	Indian Housing Block Grant
2002	Naknek	DCED	Bristol Bay Borough Landfill Potable Water Supply
2002	South Naknek	ANTHC	EPA Sewer Upgrade
2002	South Naknek	HUD	Indian Block Housing Grant
2002	South Naknek	ANTHC	Renovate washeteria: plan, design, build.
2001	Naknek	HUD/AFHC	Construct four single family units
2001	Naknek	DHSS	Bristol Bay Health Corp Office Equipment
2001	Naknek	DCED	Bristol Bay Borough Fisherman's Dock Engineering and Design
2001	Naknek	DCED	Feasibility Business Plan for Seafood Processing
2001	Naknek	DCED	Bristol Bay Borough Flake Ice Plant Engineering
2000	King Salmon	DCED	Bristol Bay Borough Design and Construct Animal Control Facility
2000	King Salmon	DEC/MGL	Sewer, Phase IIIB, 36 lots, King Salmon Creek
2000	King Salmon	EDA	Southwest Vocational Training Center
2000	Naknek	HUD	Indian Housing Block Grant
2000	Naknek	DOT&PF	Trail construction, pedestrian and bike
2000	South Naknek	ANTHC	Sanitation Design, Assessment

Source: Rural Alaska Project Information and Delivery System, Alaska Department of Community and Economic Development.

## Land uses

With only 505 square miles, Bristol Bay Borough is geographically the smallest census area in the state. The largest land owners in the Bristol Bay region are the state and federal governments. The largest private landowners in the Bristol Bay region are the Native corporations formed as a result of the Alaska Native Claims Settlement Act (ANCSA) of 1971. Each of the villages of the region was entitled to select land in its vicinity. The Bristol Bay Native Corporation (BBNC), the regional corporation, was also allowed to select land. BBNC controls the subsurface rights of most land owned by the village corporations, while the village retains surface rights.

Access to the Naknek River for fishing and transportation has determined land use in the Bristol Bay Borough. Naknek and South Naknek still dominates the land use picture. Major canneries still operate in both communities and support services to the canneries and fishing fleet are the dominant commercial enterprises.

The lands in and around Naknek consist of private owners, native allotments, state owned properties and those parcels owned by the Paug-Vik Village Corporation. Under the Alaska Native Claims Settlement Act (ANCSA) of 1971, Paug-Vik was entitled to selected 124,728 acres of land from the federal government.

The community of King Salmon evolved from an air navigation silo built in 1930, followed by a U.S. Air Force base at the beginning of World War II. The air base was operational until 1993 when it went into caretaker status. In general, local, State, and federal government activities dominated King Salmon land uses. The headquarters of the Katmai National Park is located in King Salmon. The Lake and Peninsula Borough offices are located in King Salmon.

The Katmai National Park is adjacent to the Borough Visitor interests are related to land use in the area including volcanic features from the eruption of at Katmai National Park and Preserve, bear viewing at Brooks Camp—30 air miles from King Salmon, and sportfishing and hunting a numerous remote lodges and camps in the region.